

**AMTRAK EQUIPMENT MAINTENANCE DEPARTMENT**

**STANDARD MAINTENANCE PROCEDURE**

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SMP NO. 28603

ISSUE DATE: January 12, 1982

REVISION DATE: June 1, 1991

TITLE: INSPECTION OF PRIVATE CARS

EQUIPMENT TYPE: STANDARD FOR HANDLING PRIVATELY-OWNED CARS IN AMTRAK  
TRAINS

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SCOPE

This document describes Amtrak's requirements for the handling of privately-owned cars in Amtrak trains. Carriers may impose additional requirements.

PROCEDURE

- I. (A) The cars must comply with applicable section of the current edition of A.A.R. Car Rules, and all sections of the S.M.P. The cars will be subjected to a twelve month inspection from last inspection and certification by Amtrak Mechanical Department or its authorized representative. A copy of PC1 is to be retained in the car electric locker.
  
- (B) Cars must be equipped with CS, H, F or T coupler on both ends of the cars. Cars must be equipped with roller bearings. Cars must have steam connectors removed. Inspection of private cars can be made at an Amtrak car facility with advance arrangement with the facility manager. This inspection will be at owner's expense. Movement to Amtrak facility will be at owner's expense and, if car is not approved for movement in Amtrak service, car must be removed from Amtrak facility within seven (7) days at owner's expense. Annual (PC1) inspection may be made at any location that owner designates by an Amtrak authorized inspector. If car is found unfit for movement in Amtrak service, car owner will be advised in writing of defects necessary to correct before car can be reinspected for Amtrak's certification. Amtrak will not be required to make such repairs. The cost of all labor and materials consumed by Amtrak or the operating railroad in inspecting private cars will be at owner's expense.

- (C) Any cost incurred in making an inspection and repairs to comply with the requirements of this SMP will be for the account of the car owner. Routine inspections that occur prior to or during train movement are not chargeable to the owner.
- (D) Cars must be equipped with one or more marker lights that comply with 49 CFR Part 221, Rear End Marking Device. The marker lights must have a battery back up source that will burn for at least 2 hours.
- (E) Cars must be equipped with foot plates on both ends and be compatible with Amtrak equipment. If car is not equipped with foot plate on observation end, it will be restricted to first or rear passenger carrying car in train. Cars not complying with paragraph are not guaranteed rear position.
- (F) Cars which must operate on the rear because of lack of diaphragms or foot plates are subject to cutoff or set out without notice due to operational problems.
- (G) The maximum electrical load capacity on private cars when using H.E.P. cannot exceed 85 kw effective July 1, 1986.
- (H) Prior to first movement in Amtrak trains, a clearance form, MAP-PC-5-Rev. must be completed sent and approved as instructed on form. Any changes to the configuration, which alters the dimensions on file must be reported with new form, before next movement.
- (I) The car owner will maintain a continuous record of all repairs and modifications on PC-4 shop report. This report will be sent in with PC1 annually.
- (J) On completion of the twelve month inspection (PC1) the owner will forward a copy of PC1, PC1A, PC3 and PC4 forms to Superintendent of Cars (private cars). Copies of all PC forms must be kept in electrical locker.
- (K) All cars must be equipped with Amtrak full 480 head-end power pass through and 27-point communication system and main reservoir line.
- (L) Cars equipped with cushion draft gear must be blocked in neutral position with 1" maximum draft in Amtrak train service.
- (M) All work performed must comply with all aspects to the applicable standards and recommended practices adopted by A.A.R.

- (N) Private cars when on Amtrak trains or Amtrak property must display Amtrak I.D. number (800,000 series) as per Amtrak Drawing Number A-002-5079.
- (O) When any private car is shopped at any Amtrak facility, the following information must be entered in the ARROW system computer:
1. Date shopped and defects.
  2. Date released.
  3. Repairs made on car.
- (P) Cars equipped with ABDW brake are limited to no more than 2 cars per train and not in consecutive order in train consist.

Note: Use freight single car testing device when testing this equipment.

## II. Cars over 40 years old

In addition to the provisions of item #I above, the following will apply.

- (A) The car must undergo a detailed inspection (as described on attached PC1 and PC2 forms and their instructions) by the Mechanical Departments of Amtrak, an Amtrak carrier or an authorized Amtrak Inspector Representative. The first inspection shall occur within the 40th year from date built. After the initial 40 year inspection, the following inspection schedules and related instruction shall be followed. Cars that have received a previous 40 year inspection under SMP 28603 with the revision date of February 8, 1985, will be due a new 40 year inspection six (6) years from that inspection date using current Form PC2 and PC2 instructions.
- (1) 200,000 miles from 40 year inspection car will be inspected using MAP PC2A and PC2A instructions.
  - (2) 350,000 miles from 40 year inspection car will be inspected using MAP PC2A and PC2A instructions.
  - (3) 500,000 miles from 40 year inspection car will be inspected using MAP PC2A and PC2A instructions.
  - (4) In a ten year period if car does not meet mileage criteria, car must be inspected using Form PC2A and PC2A instructions regardless of the mileage.

- (B) The car owner will maintain and report a log of non-Amtrak routes and mileage traveled (PC3 route mileage log). Amtrak will maintain route mileage record in Amtrak ARROW system for mileage requirements.
- (C) On completion of the 40 year inspection and all other inspections, the owner will forward copies of all PC forms to Superintendent of Cars (private cars) office for file.

III. All cars operating on Amtrak trains must be equipped with Amtrak head-end power and comply with the following requirements:

- (A) Cars must meet Amtrak specifications for head-end power conversion which include 480 head-end power and 27-point communication systems on both A&B ends and R&L sides. MU installation is optional.
- (B) All material used in head-end power conversion must meet Amtrak specifications.
- (C) Final testing and approval of the head end power conversion will be done at Amtrak facilities. Inspection charge shall not exceed two (2) hours.
- (D) Single line schematic or equal depicting all loads fed from head-end power must be maintained and furnished to Amtrak upon completion of head-end power installation. Phase load balance must be within 5%.
- (E) On completion of head-end power conversion, a clearance diagram PC5 must be completed and furnished to Amtrak.
- (F) All cars operating on trains with Superliner Equipment must have 2 each 33" 480 extension cables supplied by the owner to ensure proper connection with Superliner equipment.